

WHAT IS CLAIMED:

1 Sub A 1. An apparatus for electrostatically coating a  
2 human with a coating composition, the apparatus  
3 comprising:  
4 an enclosure;  
5 a mount positioned on the enclosure;  
6 an electrostatic nozzle connected to the  
7 mount, the electrostatic nozzle for passing the coating  
8 composition; and  
9 a grounding connection positioned inside the  
10 enclosure, the grounding connection capable of  
11 electrically grounding the human;  
12 wherein the coating composition passed  
13 through the electrostatic nozzle is depositable upon  
14 the human.

1 2. The apparatus of claim 1 wherein the  
2 enclosure comprises:  
3 a first wall wherein the mount is positioned  
4 on the first wall; and  
5 a second wall positioned substantially  
6 opposite the first wall, the second wall including a  
7 portion curved about an axis.

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1           3.    The apparatus of claim 2, wherein the portion  
2    of the second wall curved about an axis forms a  
3    parabolic curve.

1           4.    The apparatus of claim 2, wherein the portion  
2    of the second wall curved about an axis forms an  
3    elliptical curve.

1           5.    The apparatus of claim 2, wherein the portion  
2    of the second wall curved about an axis forms a  
3    circular curve.

1           6.    The apparatus of claim 1, wherein the  
2    enclosure has a circular cross section corresponding to  
3    a vertical plane intersecting the enclosure.

1           7.    The apparatus of claim 1, wherein the  
2    enclosure comprises:  
3                an entry point for permitting the human to  
4    enter the enclosure; and  
5                a door for covering the entry point.

1 8. The apparatus of claim 1, wherein the  
2 grounding connection comprises is a grounding plate  
3 positionable for contact with the human.

1 9. The apparatus of claim 1, further comprising:  
2 a fluid path connected to the electrostatic  
3 nozzle, the fluid path for carrying the coating  
4 composition to the electrostatic nozzle.

1 10. The apparatus of claim 9, further comprising:  
2 a reservoir connected to the fluid path, the  
3 reservoir for storing the coating composition.

1 11. The apparatus of claim 1, wherein the  
2 enclosure comprises a dielectric material.

1 12. The apparatus of claim 1, further comprising:  
2 means to electrically charge the enclosure.

1 13. The apparatus of claim 1, wherein the  
2 electrostatic nozzle is configurable to pass an  
3 (atomized) and electrically charged coating composition.

1 14. The apparatus of claim 1, further comprising  
2 an exhaust means placed proximate to the enclosure, the  
3 exhaust means for at least removing a portion of the  
4 coating composition passed by the electrostatic nozzle.

1 15. The apparatus of claim 14, wherein the  
2 exhaust means comprises an exhaust fan.

1 16. The apparatus of claim 14, wherein the  
2 exhaust means is substantially formed of a dielectric  
3 material.

1 17. The apparatus of claim 1, wherein the mount  
2 comprises a mount moving means secured to the mount,  
3 wherein the mount is movable by the mount moving means  
4 such that the mount and the electrostatic nozzle are  
5 movable.

1 18. The apparatus of claim 17, wherein the mount  
2 moving means comprises a worm drive.

1 19. The apparatus of claim 17, wherein the mount  
2 moving means is configured to move the mount in a  
3 vertical direction.

1 20. The apparatus of claim 17, wherein the mount  
2 moving means is configured to pivot the mount in a  
3 vertical plane.

1 21. The apparatus of claim 17, wherein the mount  
2 moving means is configured to pivot the mount in a  
3 horizontal plane.

1 22. The apparatus of claim 1, wherein the  
2 electrostatic nozzle is a first electrostatic nozzle  
3 and the mount is a first mount, the apparatus further  
4 comprising:

5 a second mount positioned on the enclosure;

6 and

7 a second electrostatic nozzle connected to  
8 the second mount, the second electrostatic nozzle for  
9 passing the coating composition.

1           23. The apparatus of claim 22, wherein the second  
2 mount is located separate from the first mount.

1           24. The apparatus of claim 1, further comprising:  
2           a misting chamber positioned adjacent to the  
3 enclosure, the misting chamber for substantially  
4 directing the coating composition into the enclosure.

1           25. The apparatus of claim 1, further comprising:  
2           a compressed air supply connected to the  
3 electrostatic nozzle, the compressed air supply for  
4 providing compressed air to the electrostatic nozzle.

1           26. The apparatus of claim 25, wherein the  
2 compressed air supply comprises an air compressor.

1           27. The apparatus of claim 25, wherein the  
2 compressed air supply comprises an air tank.

1           28. The apparatus of claim 25, further  
2 comprising:

3 an air flow regulator for regulating the  
4 pressure of the compressed air provided to the  
5 electrostatic nozzle.

1 29. The apparatus of claim 1, further comprising:  
2 an air intake connected to the electrostatic  
3 nozzle, the air intake for receiving compressed air for  
4 use by the electrostatic nozzle.

1 30. The apparatus of claim 1, further comprising:  
2 a reservoir for storing the coating  
3 composition;  
4 a coating composition line connected to the  
5 reservoir and the electrostatic nozzle, the coating  
6 composition line for carrying the coating composition  
7 from the reservoir to the electrostatic nozzle; and  
8 a compressed air intake connected to the  
9 reservoir, the compressed air intake for receiving  
10 compressed air.

1        31. A method for applying a coating composition  
2        to a human, the method comprising the steps of:  
3                providing a coating solution;  
4                providing an electrostatic nozzle for  
5        spraying the coating solution;  
6                (atomizing the coating solution;  
7                electrically charging the coating solution;  
8                directing the electrically charged and  
9        atomized coating solution towards the human;  
10                depositing at least a portion of the  
11        electrically charged and atomized coating solution on  
12        the human.

1                32. The method of claim 31, wherein the step of  
2        atomizing occurs before the step of electrically  
3        charging.

1                33. The method of claim 31, wherein the step of  
2        electrically charging occurs before the step of  
3        atomizing.

1        34. The method of claim 31, further comprising  
2        the steps of:



3 grounding the human;  
4 electrically attracting the coating solution  
5 towards the grounded human.

1 39.35. The method of claim 31, further comprising  
2 the steps of:

3 providing an enclosure for enclosing the  
4 human;

5 electrically repelling the coating solution  
6 from at least a portion of the enclosure.

1 40.36. The method of claim 35, further comprising  
2 the steps of:

3 extracting at least a portion of the coating  
4 solution from the enclosure, the extracted at least a  
5 portion of the coating solution not being deposited on  
6 the human.

1 34.37. The method of claim 33, further comprising  
2 the steps of:

3 moving the electrostatic nozzle.

1 ~~35~~ 38. The method of claim 37, wherein the step of  
2 moving the electrostatic nozzle includes the step of  
3 moving the electrostatic nozzle in a vertical  
4 direction.

1 ~~36~~ 39. The method of claim 37, wherein the step of  
2 moving the electrostatic nozzle includes the step of  
3 oscillating the electrostatic nozzle.

1 ~~37~~ 40. The method of claim 39, wherein the step of  
2 moving the electrostatic nozzle includes the step of  
3 oscillating the electrostatic nozzle in a vertical  
4 plane.